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CLAIMS

1. Method of reconfiguration for a network node in an ad-hoc network, comprising the step:

preparing a transition from an initial software configuration to a target software configuration;

characterized by

deciding on commitment to the target software configuration in view of a result of reconfiguration indicated through at least one further network node in the ad-hoc network; wherein the step of committing to the target software configuration is taken when every result of reconfiguration received at the network node from a reachable further network node is evaluated to be positive.

2. Method according to claim 1, *characterized in that* it further comprises a step of negotiating a maximum reconfiguration time period with at least one further network node before executing the transition from the initial software configuration to the target software configuration.

3. Method according to claim 2, **characterized in that** the maximum reconfiguration time period is the maximum time for reconfiguration, indication of reconfiguration result, and executing a fallback to the initial software configuration for network nodes in the ad-hoc network participating in the reconfiguration process.
4. Method according to one of the claims 1 to 3, **characterized in that** it further comprises a step of coordinating a start of reconfiguration at the network node with a start of reconfiguration in at least one further network node.
5. Method according to one of the claims 2 to 4, **characterized in that** it further comprises a step of starting a timer in the network node for measurement of actual reconfiguration time versus maximum reconfiguration time period.
6. Method according to one of the claims 1 to 5, **characterized in that** it further comprises a step of determining network nodes being reachable from the reconfigured network node when ad-hoc network communication is interrupted during the transition from the initial software configuration to the target software configuration.
7. Method according to one of the claims 1 to 6, **characterized in that** it further comprises a step of falling back to the initial software configuration when at least one result of reconfiguration received at the

network node from a reachable further network node is evaluated to be negative.

8. Method according to one of the claims 1 to 6, **characterized in that** it comprises a step of falling back to the initial software configuration when no result of reconfiguration result is received at the network node until expiry of the maximum reconfiguration time period.
9. Method according to one of the claims 1 to 8, **characterized in that** it further comprises a step of sending a positive reconfiguration result when the transition from the initial software configuration to the target software configuration is successful.
10. Method according to claim 9, **characterized in that** the positive reconfiguration result is sent as positive signal or indicated through automatic set-up of network connectivity.
11. Method according to claim 9 or 10, **characterized in that** the positive reconfiguration result is sent repeatedly.
12. Method according to one of the claims 1 to 8, **characterized in that** it further comprises a step of sending a negative reconfiguration result when the transition from the initial software configuration to the target software configuration is not successful.
13. Method according to claim 12, **characterized in that** the negative reconfiguration result is sent as fallback signal.

14. Method according to claim 12 or 13, **characterized in that** the negative reconfiguration result is sent repeatedly.
15. Method according to one of the claims 12 to 14, **characterized in that** it further comprises a step of forwarding results of reconfiguration received from further network nodes to the ad-hoc network.
16. Method according to one of the claims 1 to 15, **characterized in that** it further comprises a step of determining network nodes in the ad-hoc network executing reconfiguration.
17. Method according to claim 16, **characterized in that** the step of determining network nodes in the ad-hoc network executing reconfiguration is based on at least one criteria selected from a group comprising:
 - communication capability of network node;
 - network connectivity;
 - profile data of network node;
 - movement pattern of network node;
 - hardware status of network node;
 - priority of network node; and
 - group membership of network node.
18. Method according to claim 16 or 17, **characterized in that** the step of determining network nodes in the ad-hoc network executing reconfiguration is executed before start of reconfiguration.

19. Method according to one of the claims 16 to 18,
characterized in that the step of determining network nodes in the ad-hoc network executing reconfiguration is repeated during reconfiguration.
20. Method according to one of the claims 1 to 19,
characterized in that it further comprises a step of retrieving software for executing the transition from the initial software configuration to the target software configuration locally from a portable electronic device (IC/USIM).
21. Method according to one of the claims 1 to 19,
characterized in that it further comprises a step of retrieving software for executing the transition from the initial software configuration to the target software configuration remotely via a mobile communication environment.
22. Method according to claim 21, **characterized in that** it further comprises a step of selecting the mobile communication environment from a group comprising a mobile communication network, wireless local area network, personal area network, wireless infrared communication network (IrDA), Bluetooth communication network.
23. Method according to claim 21, **characterized in that** it further comprises a step of selecting the mobile communication network from a group comprising GSM, PDC, IMT 2000, PHS, IS-95.

24. Method according to one of the claims 20 to 23,
characterized in that it further comprises a step of pre-installing software for executing the transition from the initial software configuration to the target software configuration in the network node.
25. Method according to one of the claims 20 to 24,
characterized in that it further comprises a step of selecting software for executing the transition from the initial software configuration to the target software configuration from a group comprising application software, communication software, operating system software, firmware.
26. Method according to claim 25, **characterized in that** it further comprises a step of retrieving software for executing the transition from the initial software configuration to the target software configuration in combination with related control parameters.
27. Method according to one of the claims 1 to 24,
characterized in that software for executing the transition from the initial software configuration to the target software configuration is network node specific.
28. Method according to one of the claims 1 to 27,
characterized in that the network node is a mobile device or a stationary device.
29. Network node for operation in an ad-hoc network,
comprising:

a software reconfiguration unit adapted to prepare a transition from an initial software configuration to a target software configuration;

characterized by

a reconfiguration commitment unit adapted to decide on commitment to the target software configuration in view of a result of reconfiguration indicated through at least one further network node in the ad-hoc network; wherein the reconfiguration commitment unit is adapted to commit to the target software configuration when every result of reconfiguration received at the network node from a reachable further network node is evaluated to be positive.

30. Network node according to claim 29, **characterized in that** it further comprises a negotiating unit adapted to negotiate a maximum reconfiguration time period with the... at least one further network node before executing the transition from the initial software configuration to the target software configuration.
31. Network node according to claim 30, **characterized in that** the negotiation unit is adapted to negotiate the maximum reconfiguration time period as the maximum time for reconfiguration, indication of reconfiguration result, and executing a fallback to the initial software configuration for network nodes in the ad-hoc network participating in the reconfiguration process.

32. Network node according to one of the claims 29 to 31, **characterized in that** it further comprises a reconfiguration coordination unit adapted to coordinate a start of reconfiguration at the network node with a start of reconfiguration in the at least one further network node.
33. Network node according to one of the claims 30 or 32, **characterized in that** it further comprises a timer unit adapted to measure an actual reconfiguration time versus the maximum reconfiguration time period.
34. Network node according to one of the claims 29 to 33, **characterized in that** it further comprises a connectivity unit adapted to determine network nodes being reachable from the reconfigured network node when ad-hoc network communication is interrupted during the transition from the initial software configuration to the target software configuration.
35. Network node according to one of the claims 29 to 33, **characterized in that** the reconfiguration commitment unit is adapted to decide on falling back to the initial software configuration when at least one result of reconfiguration received at the network node from a reachable further network node is evaluated to be negative.
36. Network node according to one of the claims 29 to 33, **characterized in that** the reconfiguration commitment unit is adapted to decide on falling back to the initial software configuration when no result of reconfiguration

result is received at the network node until expiry of the maximum reconfiguration time period.

37. Network node according to one of the claims 29 to 36, **characterized in that** it further comprises a communication unit adapted to send a positive reconfiguration result when the transition from the initial software configuration to the target software configuration is successful.
38. Network node according to claim 32, **characterized in that** the communication unit is adapted to send the positive reconfiguration result as positive signal or adapted to indicate the positive reconfiguration result through automatic set-up of network connectivity.
39. Network node according to claim 37 or 38, **characterized in that** the communication unit is adapted to send the positive reconfiguration result repeatedly.
40. Network node according to one of the claims 29 to 36, **characterized in that** it further comprises a communication unit adapted to send a negative reconfiguration result when the transition from the initial software configuration to the target software configuration is not successful.
41. Network node according to claim 40, **characterized in that** communication unit is adapted to send the negative reconfiguration result as fallback signal.

42. Network node according to claim 40 or 41, **characterized in that** communication unit is adapted to send the negative reconfiguration result repeatedly.
43. Network node according to one of the claims 37 to 42, **characterized in that** the communication unit is further adapted to forward results of reconfiguration received from further network nodes to the ad-hoc network.
44. Network node according to one of the claims 29 to 43, **characterized in that** it further comprises a determination unit adapted to determine network nodes in the ad-hoc network executing reconfiguration.
45. Network node according to claim 44, **characterized in that** the determination unit is adapted to determine network nodes in the ad-hoc network executing reconfiguration based on at least one criteria selected from a group comprising:
- communication capability of network node;
 - network connectivity;
 - profile data of network node;
 - movement pattern of network node;
 - hardware status of network node;
 - priority of network node; and
 - group membership of network node.
46. Network node according to claim 44 or 45, **characterized in that** the determination unit is adapted to determine network nodes in the ad-hoc network executing reconfiguration before start of reconfiguration.

47. Network node according to one of the claims 44 to 46, **characterized in that** the determination unit is adapted to determine network nodes in the ad-hoc network executing reconfiguration repeatedly during reconfiguration.
48. Network node according to one of the claims 27 to 47, **characterized in that** it further comprises a software retrieval unit adapted to retrieve software for executing the transition from the initial software configuration to the target software configuration locally from a portable electronic device .
49. Network node according to one of the claims 29 to 48, **characterized in that** the software retrieval unit is further adapted to retrieve software for executing the transition from the initial software configuration to the target software configuration remotely via a mobile communication environment.
50. Network node according to claim 49, **characterized in that** the software retrieval unit is adapted to select the mobile communication environment from a group comprising a mobile communication network, wireless local area network, personal area network, wireless infrared communication network (IrDA), Bluetooth communication network.
51. Network node according to claim 50, **characterized in that** the software retrieval unit is further adapted to select the mobile communication network from a group comprising GSM, PDC, IMT 2000, PHS, IS-95.

52. Network node according to one of the claims 47 to 51, **characterized in that** it further comprises a software storage unit adapted to store software for executing the transition from the initial software configuration to the target software configuration in the network node, the software being selected from a group comprising application software, communication software, operating system software, firmware.
53. Network node according to claim 52, **characterized in that** the software storage unit is further adapted to store software for executing the transition from the initial software configuration to the target software configuration in combination with related control parameters.
54. Network node according to one of the claims 29 to 53, **characterized in that** it is a mobile device or a stationary device.
55. A computer program product directly loadable into the internal memory of a network node of an ad-hoc network, comprising software code portions for performing the steps of one of the claims 1 to 28, when the product is run on a processor of the network node.